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COMMUNICATED.

We give room with much pleasure in our columns to the following interesting communication. To many of our readers it may be somewhat dry and cyphery, but to the learned and curious in such matters. it will be exceedingly interesting, and that must prove our apology for occupying so so much space with nothings.

Lahaina, Sept. 23, 1840.

DEAR SIR,—It is now a long time since I promised to furnish you the Japanese numerals for the paper; but an unusual variety of engagements of late, have left me scarce a leisure hour, at any time, for such work. This is my apology for the delay. I will now, however, endeavor to comply with your request; or, at least, to numerals, as will enable any one to form a very good idea of their system. To give you the whole, as I copied them from more matter than your paper would contain for several weeks.

In expressing the Japanese names of their numerals in our own letters, I have given the vowels the sounds which they usually have in the European languages, sound in the English language.

that this system of numerals is as simple easy indeed, that, at my first sitting with a native Japanese, while indeed we knew this will not seem strange to one who sees, that, after using ten words to express he first ten cardinal numbers, only three additional new words are needed before we arrive at a million, and even to many ombined, express all the numbers up to one hundred, which is called hiakfu. This again, combined with the same ten, carries us on to one thousand (shen.) Shen, combined with hiakfu and the first ten, reach again to ten thousand (mon.) Mon, combined again with the same lower numbers, carries us up to ogf, (100,-000,000. Then Ko, Mureoko, Shoajoko, and Muiingku are words used to express higher and still higher combinations; making only eighteen words in all (including the first ten) to express a number so great, that it will hardly find a name in the English scholar's enumeration table.

So far as I have observed, the combinations of these numerals are uniform, that is, are always formed in the same manner, till we arrive at millions, and even higher. In numbers which are much arger, there is some variety in the way of combining; the same number being expressed, at one time, by the combination of one set of numbers, at another, by a different set, which may easily be done but always on precisely the same principle, which is, that the higher number is formed from the lower numbers simply by placing the lower in juxtaposition; just as the letters of an algebraical expression are multiplied together. In this way, a Japanese scholar may be able always to comprehend the amount of the highest number, by knowing the amount of each component part of which the number is ormed. A great advantage in this sys-

changed in form, when they enter into higher combinations.

The tollowing abstract will give the leading numbers, and show the method of using the whole.

Iche, 1; Ne, 2; San, 3, She, 4; Go, 5; Rogf, 6; Shetz, 7; Hoch, 8; Kfu, 9; Zu, 10; Zu ich, 11; that is, ten, one; Zu ne, 12; Zu san, 13; Zu she, 14; Zu go, 15; Zu rogf, 16; Zu shetz, 17; Zu hoch, 18; Zu kfu, 19; Ne zu, 20; that is, two tens; Hiakfu mureoko, Nezu iche, 21; Nezu ne, 22; and so on to San zu, 30; or three tens; Sanzu iche, 31, &c.; Shezu, 40; or four tens; Gozu, 50; Rogf zu, 60; Shetz zu, 70; Hoch zu, 80; Kfuzu, 90; Kfuzu kfu, 99; Hiakfu, 100. Hiakfu iche, 101; Hiakfu ne, 102; Hiakfu san, 103; Hiakfu she, 104; Hiakfu go, furnish you with such an abstract of these 105; Hiakfu rogf, 106; Hiakfu shetz, 107; Hiakfu hoch, 108; Hiakfu kfu, 109; Hiakfu zu iche, 111; Hiakfu nezu, 120; and so on, by the same process which is folthe lips of the Japanese, would furnish lowed in counting one hundred, until we come to Ne hiakfu, 200; San hiakfu, 300; She hiakfu, 400; Go hiakfu, 500; Rogf hiakfu, 600; Shetz hiakfu, 700; Hoch hiakfu, 800; Kfu hiakfu, 900; Kfu hiakfu Kfuzu kfu, 999; SHEN, 1000; Shen iche, 1001; Shen ne, 1002, Shen san, 1003; masmuch as these letters have no uniform Shen zu, 1010; Shen nezu, 1020; Shen sanzu, 1030; Shen hiakfu, 1100; Shen ne It will be seen, by the least inspection, hiakfu, 1200; Shen san hiakfu, 1300; and so on up to Ne shen, 2000; Ne shen iche, as it can possibly be made; so simple and 2001, &c.; San shen, 3000; She shen, 4000; Go shen, Rogf shen, Shetz shen, Hoch shen, Kfu shen, 9000; ICHE MON, only a few words of each other's language, 10,000; Iche mon iche, 10,001, &c., altoccupied me no more than fifteen min- ways remembering, that a lesser number, utes to learn to count a million. And placed after a greater, is so much added, to the greater; and a lesser number, placed before a greater, is a multiplier of the greater; as Ne mon, 20,000; Ne mon iche, 20,001; Ne mon ne, 20, 002; Ne mon san, 20,003, &c.; San mon, millions. The first ten cardinal numbers, 30,000; She mon, 40,000; Go mon, 50,-000, &c.; Zu mon, 100,000; Zu iche mon, 110,000; Nezu mon, 200,000; Sanzu mon, 300,000; Shezu mon, 400,000; Kfuzu mon, 900,000; Hiakfu mon, 1,000; Ne hiakfu man, 2,000,000; San hiakfu mon, 3,000,000; Kfu hiakfu mon, 9,000,000; Shen mon, 10,000,000; Shen hiakfu mon, 11,000,000; Shen ne hiakfu mon, 12,-000,000; Shen kfu hiakfu mon, 19,000,-000; Nezu hiakfu mon, 20,000,000; (this last same as Ne shen mon, i. e. 20×100 \times 10,000 = 2 \times 1000 \times 10,000;) Sanzu hiakfu mon, 30,000,000; Kfuzu hiakfu mon, 90,000,000; ICHE OGF, 100,000,-

In continuing this series of numerals, it Rogf hiakfu shen mon muiingku, will be sufficient only to notice the prin- Shetz hiakfu shen mon muiingku, cipal numbers, as they rise one above Hoch hiakfu shen mon muiingku, another, by a ratio of ten, an hundred or a thousand; omitting the intermediate numbers, inasmuch as they are always formed with perfect regularity, the same as in counting from one upwards to an hundred, thousand, ten thousand, &c., e. g. Ne ogf, 200,000,0000; San ogf, 300,000,000; She ogf, Go ogf, Rogf ogf, &c., &c., &c.

Zu ogf, 1,000.000,000; Hiakfu ogf 10,000,000,000; Shen ogf, 100,000,000, 000; Zu shen ogf, 100,000,000,000,000; Iche mon ogf,10,000,000,000,000; Hiakfu mon ogf, 1,000,000,000,000,000; Kfu hiakfu mon ogf, 9,000,000,000,000,000; Існо от Існе ко, 10,000,000,000,000,000. Hiakfu ko, 1,000,000,000,000,000,000. Iche shen ko, 10,000,000,000,000,000,000

tem is, that the simple numbers are never Iche mon ko, 10,000,000,000,000,000,000,-

Iche ogf ko, 10,000,000,000,000,000,000,-000,000.

Hiakfu ogf ko, 1,000,000,000,000,000,000,-000,000,000. Shen ogf ko, 10,000,000,000,000,000,000

000,000,000. Hiakfu shen ogf ko, 1,000,000,000,000,000,

000,000,000,000,000. ICHE MUREOKO, 10,000,000,000,000,000,-

000,000,000,000,000. Zu mureoko, these numbers for him-Shen mureoka, self.

Mon mureoko, 100,000,000,000,000,0000,-000,000,000,000,000,000.

Zu mon mureoko,

Hiakfu mon mureoko,

Iche ogf mureoko, 100,000,000,000,000,000 000,000,000.000,000,000.

Zu ogf mureoko, Hiakfu ogf mureoko, Shen ogf mureoko,

Zu shen ogf (or mon ogf) mureoko. Kfu hiakfu shen ogf mureoko, 90,000,000,-000,000,000,000,000,000,000,000,000,-

000,000,000. Існе внодоко, 100,000,000,000,000,000.

000,000,000,000,000,000,000,000,000.

Zu Shoajoko, Hiakfu shoajoko, Shen shoajoko, Zu shen shoajoko, Hiakfu shen shoajoko, Iche mon shoajoko,

Zu mon shoajoko, Hiakfu mon shoajoko,

Sheu mon shoajoko, Kfu shen mon shoajoko, 900,000,000,000 000,000,000,000,000,000,000,000,000, 000,000,000,000,000.

Iche ogf shoajoko, 1,000,000,000,000,000, 000,000,000,000,000,000,000 000,000,000,000.

Zu ogf shoajoko, Hiakfu ogf shojoko, Kfu hiakfu ogf shoajoko,

ICHE MUTINGKU, 1,000,000,000,000,000,--,000,000,000,000,000,000,000,000,000,

000,000,000,000,000. Zu muiingku,

Hiakfu muiingku, Shen muiingku,

Iche mon muiingku, 10,000,000,000,000,-000,000,000,000,000,000,000,000,000, 000,000,000,000,000,000,000.

Zu mon muiingku, Hiakfu mon muiingku, Shen mon muiingku, Nezu shen mon muiingku, Hiakfu shen mon muiingku, Ne hiakfu shen mon muiingku, San hiakfu shen mon muiingku, She hiakfu shen mon muiingku, Go hiakfu shen mon muiingku, Kfu hiakfu shen mon muiingku,

Iche ogf muiingku (same as Iche mon shen mon muiingku, 100,000,000,000,-000,000,000,000,000,000,000,000,000,-000,000,000,000,000,000,000,000,000

Zu ogf muiingku, Sanzu ogf muiingku, Shezu ogf muiingku, Gozu ogf muiingku, Rogfzu ogf muiiugku, Shetzzu ogf muiingku, Hochzu ogf muiingku, Kfuzu ogf muiingku, Hiakfu ogf muiingku, Ne hiakfu ogf muiingku, San hiakfu ogf muiingku, She hiakfu ogf muiingku, Go hiakfu ogf muiingku,

Shen ogf muiingku, 100,000,000,000,000,--,000,000,000,000,000,000,000,000,000 000,000,000,000,000,000,000,000,000,000.

Ne shen ogf muiingku, San shen ogf muiingku, She shen ogf muiingku, Go shen ogf muiingku, Rogf shen ogf muiingku, Shetz shen ogf muiingku, Hoch shen ogf muiingku, Kfu shen ogf muiingku,

Any one can fill out Iche ogf ogf muiingku (same as Hiakfu shen ogf muiingku) 10,000,000,000,-000,000,000,000,000,000,000,000,-000,000,000,000,000,000,000,000,-000,000,000,000.

Zu ogf ogf muiingku, Hiakfu ogf ogf muiingku, Shen ogf ogf muiingku, Iche mon ogf ogf mulingku, Zu mon ogf ogf muiingku, Hiakfu mon ogf ogf muiingku, Shen mon ogf ogf muiingku, Zu shen mon ogf ogf muiingku, -Kiakfu shen mon ogf ogf muiingku, Shen shen mon ogf ogf muiingku, 100,--,000,000,000,000,000,000,000,000, 000,000,000,000,000,000,000,000,-000,000,000,000,000,000,000,000,-000,000,000.

This number is as high as Izero, the Japanese of whom these numerals were obtained, was able to recken. He says, however, that this is far from being the end of their enumeration table; and mentions a number he has often heard from the priests when harranguing the people; viz. Zu mon ogf bouts-bouts being a number immensely larger than muiingku; but he does not know how large a number bouts signifies, nor does he know how many numbers intervene between that and muiingku, nor what are the names of those numbers. They are all, however, familiar to the learned of Nipon.

One would suppose, that their concerns would not require any higher numbers than those above given; for, besides having such a vast number as muiingku alone, there seems to be, according to their system, full liberty to combine with that, all the numbers that are lower; and Hiakfu shan mon ogf ko mureoko shoajoko muriingku, would, by their rules, be such a number as we should express, in our figures, by a 1, followed by 165 cyphers. If this would not be large enough, the rules of combination equally allow us to say, Hiakfu hiakfu shenshen mon mon ogf ogf ko ko, &c., &c., a number expressed by us, by a 1, followed by 330 cyphers; a number large enough perhaps to express the distance to some of the fixed stars in inches.

It ought, perhaps, to be observed here, that, while the above sketch of Japanese numerals will show their system, yet probably the higher numbers are not given accurately according to that system. They were all obtained from the mouth of Izero, by commencing with the lowest and proceeding, by small gradations, to the highest number. Before we had finished the series, it was perceived, that what seemed, in one part, to be established rules for combining lesser numbers to make greater, were violated in another part; for instance, mon, in one combina tion, avails 1000; in another, 100,000; and in a third, 1.000,000; while it would seem, that it ought to avail just 10,000 in all places. Wherever this deviation was perceived. Izero was questioned thorough-